[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-0268; Directorate Identifier 2011-NM-129-AD]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Supplemental notice of proposed rulemaking (NPRM); reopening of comment

period.

SUMMARY: We are revising an earlier proposed airworthiness directive (AD) for certain The Boeing Company Model 737-600, -700, -700C, -800, -900 and -900ER series airplanes. That NPRM proposed to require inspecting for a serial number that starts with the letters "SAIC" on the left- and right-side horizontal stabilizer identification plate; a detailed inspection for correct bolt protrusion and chamfer of the termination fitting bolts of the horizontal stabilizer rear spar, if necessary; inspecting to determine if certain bolts are installed, if necessary; and doing related investigative and corrective actions if necessary. That NPRM was prompted by reports of incorrectly installed bolts common to the rear spar termination fitting on the horizontal stabilizer. This action revises that NPRM by adding airplanes to the applicability. We are proposing this supplemental NPRM to prevent loss of structural integrity of the horizontal stabilizer attachment and loss of control of the airplane. Since these actions impose an additional burden over that proposed in the NPRM, we are reopening the comment period to allow the public the chance to comment on these proposed changes.

DATES: We must receive comments on this supplemental NPRM by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.
 - Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet https://www.myboeingfleet.com. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Nancy Marsh, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6440; fax: 425-917-6590; email: nancy.marsh@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2012-0268; Directorate Identifier 2011-NM-129-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

We issued an NPRM to amend 14 CFR part 39 to include an AD that would apply to certain The Boeing Company Model 737-600, -700, -700C, -800, and -900 series airplanes. That NPRM published in the Federal Register on March 20, 2012 (77 FR 16188). That NPRM proposed to require inspecting for a serial number that starts with the letters "SAIC" on the left- and right-side horizontal stabilizer identification plate; a detailed inspection for correct bolt protrusion and chamfer of the termination fitting bolts of the horizontal stabilizer rear spar, if necessary;

inspecting to determine if certain bolts are installed, if necessary; and doing related investigative and corrective actions if necessary.

Actions Since Previous NPRM (77 FR 16188, March 20, 2012) was Issued

Since we issued the previous NPRM (77 FR 16188, March 20, 2012), we have determined that horizontal stabilizers are frequently rotated on the fleet and could be installed on any Model 737-600, -700, -700C, -800, and -900 airplane, including airplanes outside the applicability of the NPRM. Therefore, we have determined that the identified unsafe condition may exist on all Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes.

Comments

We gave the public the opportunity to comment on the previous NPRM (77 FR 16188, March 20, 2012). The following presents the comments received on the NPRM and the FAA's response to each comment.

Support for the Previous NPRM (77 FR 16188, March 20, 2012)

United Airlines stated it supports the previous NPRM (77 FR 16188, March 20, 2012).

Request to Revise Applicability

Southwest Airlines (Southwest) requested that we revise the applicability of the previous NPRM (77 FR 16188, March 20, 2012). Southwest suggested revising the applicability of the NPRM to identify serial numbers of the affected horizontal stabilizers, or to open the applicability of the NPRM to all airplanes, since the applicability listed in the previous NPRM and the effectivity of the service information do not account for horizontal stabilizers interchanged between airplanes.

We agree with the commenter's request for the reasons described in "Actions Since Previous NPRM (77 FR 16188, March 20, 2012) was Issued." We have revised paragraph (c) of this supplemental NPRM to include all The Boeing Company Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes, because the horizontal stabilizers can be rotated among airplanes. This change has been coordinated with Boeing.

We also have added new paragraph (k) to this supplemental NPRM (and re-identified subsequent paragraphs) to prohibit installation of a horizontal stabilizer on any airplane included in the applicability of this AD unless the horizontal stabilizer has been inspected and applicable corrective actions have been done and no incorrect bolt protrusion and no incorrect chamfer of the termination fitting fasteners have been found.

Request to Improve Inspection Procedures

Southwest and TUIfly Fluggesellschaft mbH requested we revise the previous NPRM (77 FR 16188, March 20, 2012) to permit operators to demonstrate compliance for inspecting the horizontal stabilizer to determine the serial number by means of a review of the manufacturer's delivery documentation for the accomplishment of Boeing Service Bulletin 737-55-1090, dated March 30, 2011. TUIfly Fluggesellschaft said that the delivery paperwork received with the airplane includes the serial number of the stabilizers installed on the airplane at the time of delivery.

We agree that the manufacturer's delivery documentation identifies the serial number of the horizontal stabilizer assembly installed on the airplane at the time of delivery. However, as discussed in the previous comment, horizontal stabilizers are rotable parts, so in addition to the delivery records, the airplane maintenance records must also be used to positively identify the current stabilizer installed on the airplane. We have added wording to paragraph (g) of this supplemental NPRM to state that a

review of manufacturer delivery and operator maintenance records is acceptable if that review conclusively determines the serial number of the horizontal stabilizer.

STC Winglet Comment

Aviation Partners Boeing stated that the installation of winglets per Supplemental Type Certificate (STC) ST00830SE does not affect accomplishment of the proposed requirements.

We have added paragraph (c)(2) to this supplemental NPRM to state that installation of STC ST00830SE

(http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/408E012E008616A78 62578880060456C?OpenDocument&Highlight=st00830se) does not affect the ability to accomplish the actions proposed by this supplemental NPRM. Therefore, for airplanes on which STC ST00830SE is installed, a "change in product" alternative method of compliance (AMOC) approval request is not necessary to comply with the requirements of Section 39.17 of the Federal Aviation Regulations (14 CFR 39.17). For all other AMOC requests, the operator must request approval of an AMOC in accordance with the procedures specified in paragraph (l) of this supplemental NPRM.

Request to Revise Applicability to Include Bolt Type BACB30XL

American Airlines (American) requested that the inspections and corrective actions specified in Boeing Service Bulletin 737-55-1090, dated March 30, 2011, be used to address the inspections and corrective actions for the alternative bolt type part number (P/N) BACB30XL that may be installed at the same locations as bolt type P/N BACB30US14K() or BACB30US16K(). American indicated the existing service information does not provide corrective actions for the alternative bolt type P/N BACB30XL that may be installed in the locations requiring bolt inspection.

We disagree with the request because Boeing Service Bulletin 737-55-1090, dated March 30, 2011, provides specific inspection criteria and measurements that are applicable only to the bolt type P/N BACB30US. Those criteria cannot be directly applied to the alternative bolt types. The manufacturer plans to revise that service bulletin to include corrective actions for the alternative bolt type P/N BACB30XL. We will review the service bulletin and may approve the revised service instructions as an AMOC to the AD, when the revised service bulletin is available. We have not changed the supplemental NPRM in this regard.

Request to Allow Alternative Service Information

Oman Air (Oman) requested that credit for prior accomplishment of Boeing Service Letters 737-SL-55-027, dated April 12, 2007, and 737-SL-55-028, dated April 26, 2007, be given as an alternative to the accomplishment of the inspections and corrective actions specified in Boeing Service Bulletin 737-55-1090, dated March 30, 2011, which are required by paragraphs (g), (h), and (k) of the previous NPRM (77 FR 16188, March 20, 2012).

We disagree. Boeing Service Letter 737-SL-55-027, dated April 12, 2007, and Boeing Service Letter 737-SL-55-028, dated April 26, 2007, were published prior to the identification of the safety issues created by the missing washers. Although these service letters provide instructions for the replacement of any missing washers, they do not address the potential durability issues created by the unclamped joint that are addressed by the repetitive inspections of the structure, as specified in Boeing Service Bulletin 737-55-1090, dated March 30, 2011. The commenter did not provide any data to substantiate the durability of the corrective actions specified in those service letters. This proposal could be considered if data were provided to substantiate the request, using the procedures defined in paragraph (I) of this supplemental NPRM for requesting approval of an AMOC. We have not changed the supplemental NPRM in this regard.

Revision to Service Bulletin

The Boeing Company (Boeing) stated it will revise Boeing Service Bulletin 737-55-1090, dated March 30, 2011, to instruct operators to inspect for bolt types other than BACB30US, to provide repair methods for bolt configurations other than BACB30US, and to revise Figure 1 of that service bulletin to correctly identify the serial number location in lieu of the part number location.

Boeing did not request a specific change to the previous NPRM (77 FR 16188, March 20, 2012). We already specified the correct location of the serial number in paragraph (j) of the previous NPRM. We also already specified that an inspection for bolt types other than part number BACB30US14K() or BACB30US16K() is required for paragraph (g) of the previous NPRM.

FAA's Determination

We are proposing this supplemental NPRM because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of these same type designs. Certain changes described above expand the scope of the original NPRM (77 FR 16188, March 20, 2012). As a result, we have determined that it is necessary to reopen the comment period to provide additional opportunity for the public to comment on this supplemental NPRM.

Proposed Requirements of the Supplemental NPRM

This supplemental NPRM would require inspecting for a serial number that starts with the letters "SAIC" on the left- and right-side horizontal stabilizer identification plate; a detailed inspection for correct bolt protrusion and chamfer of the termination fitting bolts of the horizontal stabilizer rear spar, if necessary; inspecting to determine if certain bolts are installed, if necessary; and doing related investigative and corrective actions if necessary.

Costs of Compliance

We estimate that this proposed AD affects 1,147 airplanes of U.S. registry. We estimate the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection	1 work-hour X \$85 per hour = \$85 per inspection cycle	\$0	\$85	\$97,495
Replacement of bolts	17 work-hours X \$85 per hour = \$1,445	\$1,530	\$2,975	\$3,412,325

We have received no definitive data that would enable us to provide a cost estimate for the on-condition actions (contacting Boeing and repairing cracks or damage) specified in this supplemental NPRM.

According to the manufacturer, some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs" describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that

authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
 - (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

The Boeing Company: Docket No. FAA-2012-0268; Directorate Identifier 2011-NM-129-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

- (1) This AD applies to all The Boeing Company Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes, certificated in any category.
- (2) Installation of Supplemental Type Certificate (STC) ST00830SE

 (http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/408E012E008616A786

 2578880060456C?OpenDocument&Highlight=st00830se) does not affect the ability to accomplish the actions required by this AD. Therefore, for airplanes on which STC ST00830SE is installed, a "change in product" alternative method of compliance

 (AMOC) approval request is not necessary to comply with the requirements of 14 CFR 39.17.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 55: Stabilizer.

(e) Unsafe Condition

This AD was prompted by reports of incorrectly installed bolts common to the rear spar termination fitting of the horizontal stabilizer. We are issuing this AD to prevent loss of structural integrity of the horizontal stabilizer attachment and loss of control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Inspecting the Horizontal Stabilizer and Corrective Actions

Except as provided by paragraph (i) of this AD, at the applicable times specified in paragraph 1.E., "Compliance," of Boeing Service Bulletin 737-55-1090, dated March 30, 2011: Do an inspection for a serial number that starts with the letters "SAIC" on the identification plates of the left- and right-side horizontal stabilizers, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 737-55-1090, dated March 30, 2011. A review of manufacturer delivery and operator maintenance records is acceptable to make the determination specified in this paragraph if the serial number can be conclusively identified from that review.

- (1) If a serial number starting with the letters "SAIC" is found on a horizontal stabilizer identification plate: Except as provided by paragraph (i) of this AD, at the applicable times specified in paragraph 1.E., "Compliance," of Boeing Service Bulletin 737-55-1090, dated March 30, 2011, do a detailed inspection for correct bolt protrusion and correct chamfer of the termination fitting bolts of the horizontal stabilizer rear spar, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 737-55-1090, dated March 30, 2011. Concurrently with the detailed inspection, inspect to determine if bolts other than part number (P/N) BACB30US14K() or BACB30US16K(), as applicable, are installed. Before further flight, do all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 737-55-1090, dated March 30, 2011.
 - (2) If no SAIC serial number is found, no further action is required by this AD.

(h) High Frequency Eddy Current (HFEC) and Ultrasonic Inspections of Termination Fitting and Repair

For any location where a new bolt having a P/N BACB30US14K() is installed due to damage found during any inspection required by paragraph (g) of this AD: Except as provided by paragraph (i) of this AD, at the times specified in paragraph 1.E., "Compliance," of Boeing Service Bulletin 737-55-1090, dated March 30, 2011, do HFEC and ultrasonic inspections for cracking of the forward and aft sides of the termination fitting, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 737-55-1090, dated March 30, 2011. If any crack is found in any termination fitting: Before further flight, repair in accordance with the procedures specified in paragraph (l) of this AD. Repeat the HFEC and ultrasonic inspections thereafter at intervals not to exceed 3,500 flight cycles.

(i) Exception to Compliance Time

Where Boeing Service Bulletin 737-55-1090, dated March 30, 2011, specifies a compliance time "after the original issue date on the service bulletin," this AD requires compliance within the specified compliance time after the effective date of this AD.

(i) Exceptions to Service Bulletin

- (1) Where Figure 1 of Boeing Service Bulletin 737-55-1090, dated March 30, 2011, points to the location of a part number rather than the serial number, this AD requires an inspection for an identification plate with a serial number that starts with the letters "SAIC."
- (2) If, during any inspection required by paragraphs (g) and (h) of this AD, any bolt other than P/N BACB30US14K() or BACB30US16K(), as applicable, is found: Before further flight, repair using a method approved in accordance with the procedures specified in paragraph (l) of this AD.

(k) Parts Installation Limitation

As of the effective date of this AD, no person may install a horizontal stabilizer on any airplane included in the applicability of this AD unless it has been inspected and any applicable corrective actions done using the procedures specified in paragraph (g) of this AD.

(I) Alternative Methods of Compliance (AMOCs)

- (1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.
- (2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.
- (3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(m) Related Information

(1) For more information about this AD, contact Nancy Marsh, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6440; fax: 425-917-6590; email: nancy.marsh@faa.gov.

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet https://www.myboeingfleet.com. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on February 26, 2013.

Ali Bahrami, Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2013-05328 Filed 03/06/2013 at 8:45 am; Publication Date: 03/07/2013]